

WP50-12NE 12Volt 50Ah

Specifications

Nominal Voltage(V) **12V**

Nominal Capacity

20 hour rate	(2.5A	to	10.50V)	50Ah
10 hour rate	(4.75A	to	10.50V)	47.5Ah
5 hour rate	(8.5A	to	10.20V)	42.5Ah
1 C	(50A	to	9.60V)	28.33Ah
3 C	(150A	to	9.60V)	20Ah

Weight **Approx. 15.1kg(33.2Lbs.)**

Internal Resistance (at 1KHz) **Approx. 5 mΩ**

Maximum Discharge Current for
5 seconds: **600A**

Charging Methods at 25 (77)

Cycle use:

Charging Voltage **14.4 to 15.0V**

Coefficient -5.0mV/ /cell

Maximum Charging Current : **15A**

Standby use:

Float Charging Voltage **13.5 to 13.8V**

Coefficient -3.0mV/ /cell

Operating Temperature Range

Charge **-15 (5) to 40 (104)**

Discharge **-15 (5) to 50 (122)**

Storage **-15 (5) to 40 (104)**

Charge Retention (shelf life) at 20 (68)

1 month **98%**

3 month **94%**

6 month **85%**

Case Material **ABS UL94 HB**

Option: Flammability resistance of (UL94 V-0)

Terminal **F8**

Description of torque value of hard ware for the terminals:

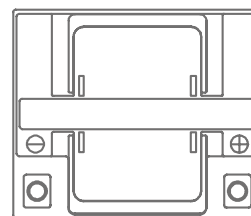
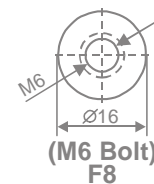
Recommended torque value **M6: 7 N-m (71kgf-cm)**

Maximum allowable torque value **M6: 9 N-m (92kgf-cm)**



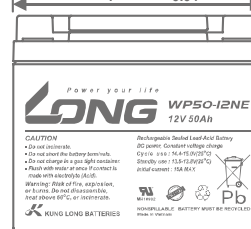
Dimensions

mm(inch)



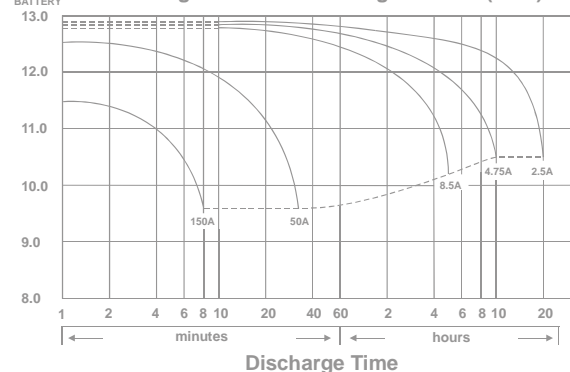
199±³₁ (7.83±^{0.12}_{0.04})

166±³₁ (6.54±^{0.12}_{0.04})

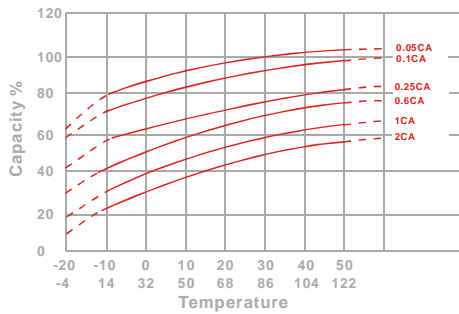


171±³₁ (6.73±^{0.12}_{0.04})

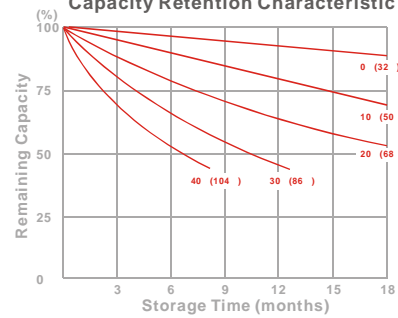
(V) FOR 12V BATTERY Discharge Time VS. Discharge Current (25)



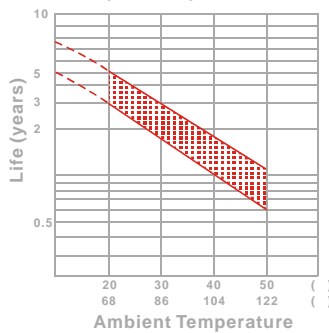
Effect of Temperature on Capacity 25 (77)



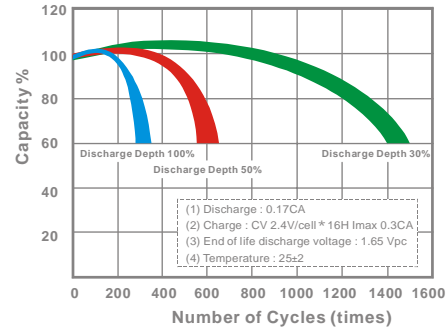
Capacity Retention Characteristic



Trickle (or float) Service Life



Cycle Service Life



- PERFORMANCE DATA

Discharge Rates in Watts to Various End Voltages at 25 (77)

End Voltage		1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
Time								
5	min	235	282	316	338	343	348	354
10	min	168	199	218	228	232	237	241
15	min	124	143	157	163	166	169	171
30	min	76.4	88.0	95.2	98.3	99.5	101	102
60	min	52.6	55.4	57.0	58.3	58.8	59.5	59.9
120	min	29.2	32.0	33.3	34.5	34.8	35.3	35.8
180	min	20.8	22.7	23.8	24.7	25.0	25.3	25.7
240	min	17.2	18.3	19.0	19.7	19.8	20.2	20.5
300	min	15.9	16.6	17.0	17.3	17.5	17.7	17.8
600	min	8.62	9.10	9.38	9.57	9.62	9.68	9.77
1200	min	4.58	4.87	5.05	5.17	5.20	5.25	5.30

- Discharge Rates in Amperes to Various End Voltages at 25 (77)

End Voltage		1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
Time								
5	min	136	163	181	195	202	206	210
10	min	86.7	104	115	123	125	128	131
15	min	76.2	82.8	85.8	88.4	89.1	90.0	91.0
30	min	44.5	49.7	51.7	53.3	53.8	54.4	55.1
60	min	25.5	28.2	29.3	30.0	30.2	30.5	30.8
120	min	15.1	16.2	16.8	17.3	17.5	17.7	17.9
180	min	11.0	11.7	12.1	12.4	12.5	12.6	12.7
240	min	8.96	9.44	9.70	9.89	9.96	10.1	10.2
300	min	7.85	8.26	8.50	8.67	8.73	8.80	8.87
600	min	4.41	4.65	4.76	4.82	4.84	4.87	4.91
1200	min	2.32	2.44	2.50	2.55	2.57	2.59	2.61

All data on the spec. sheet is an average value:

The tolerance range : X<6min(+15%~-15%), 6min X<10min(+12%~-12%),10min X < 60min(+8% ~-8%), X 60min(+5%~-5%)

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